CENTRE OF STUDIES FOR BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA

NATURAL AND ARTIFICIAL LIGHTING IN FOODCOURT

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"I hereby declare that this academic project is the result of my own research except for the quotation and summary which have been acknowledged"

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ii. ABSTRACT

Natural and Artificial lighting are two types of lighting that been used widely in food court area. The balancing usage of these two sources of light will contribute in energy efficiency for building. The energy efficiency will help in saving energy used and listed as Green Building. Energy efficiency is one of the criteria for rating that takes the energy saving for the building entitle as Green Building. High demand of shopping complex and rapid development in Malaysia cause excessive usage of energy in commercial building had drawn construction industries towards green building technology. The awareness of public about sustainability practice in food court for commercial building on natural and artificial lighting in Malaysia is still low. The activities held in these three case studies, location of opening and building itself had affected the light received in those areas. Data were collected by using observation on that area and distribution of questionnaire to public in those case studies. The illuminance of light in those case studies had determine by using equipment called lux meter. Together, these findings suggest that wide area of opening and numbers of opening installed in food court area to allow maximum amount of natural lighting penetrate and minimize the usage of energy. Besides that, level of awareness about the energy efficiency among public and industries increase through more exposure about Green Building.

Keyword: lighting, energy efficiency, awareness, illuminance, opening

CHAPTER 1: INTRODUCTION

1.1 STUDY OF BACKGROUND

The effort to make the earth a better place in the future had been explain in various ways. One of them is in construction industry. As we know, most of the country is facing a development phase including our country which is Malaysia. Therefore, green issue is one of the serious topics that must be discussed. In order to become a green country, they must imply the green technology.

In the construction industries, there are a few technology and indicator that help some organisation to evaluate the stage of green for a building. One of them is Green Building Index. Green Building Index is the rating system for the building in environmental aspects and it is been developed by PAM which is 'Pertubuhan Arkitek Malaysia' and ACEM which is 'The Association of Consulting Engineers Malaysia' ("Green Building Index," 2013)

Based on Greenbuildingindex Sdn Bhd (2013), there are six main criteria for the evaluation of Malaysian building's environmental design and performance. There are the energy efficiency, the indoor environment quality, the sustainable site planning and management, the materials and resources, the water efficiency and the innovation.

In the evaluation states, the building will be rate into four classes that represent the rate of green building according to Green Building Index which are platinum class